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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,225	03/19/2001	John Malitzis	09857-057001	9467

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EXAMINER
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HARBECK, TIMOTHY M

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/812,225	MALITZIS ET AL.	
	Examiner	Art Unit	
	Timothy M. Harbeck	3628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to properly define what an "odd-exposure limit" is.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The specification fails to properly define what an "odd-exposure limit" is.

### ***Claim Rejections - 35 USC § 103***

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samukawa et al (US 2002/0023043 A1) in view of Serkin et al (US 2002/0161687 A1).

**Re Claim 1:** Samukawa discloses a system and method for supporting odd lot trading comprising the steps of:

- Determining in a computer system whether an odd lot exposure limit has been exceeded for a quoting market participant (Page 1, paragraph 0005; Figure 2 Ref S9; “judging whether or not the number of total stocks of the odd lot selling orders or the number of total stocks of the odd lot buying orders received at the receiving step is over a threshold value that is less than the round lot stock number and is determined by a predetermined rule.”)

Samukawa does not explicitly disclose routing a received market odd-lot order for execution or delivery to the quoting market participant whose odd-lot exposure limit has not been exceeded and which is sufficient to satisfy execution of the order. Serkin discloses an odd lot execution manager that routes odd lot orders for orders for execution to a market maker that is first in the rotation for execution of such orders (paragraph 0073). While Serkin does not explicitly disclose that the odd-lot exposure limit has not been exceeded, this is inherent in the fact that the market maker is eligible (i.e. in the rotation for such orders) to execute the offer. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the teachings of Serkin to the disclosure of Samukawa so odd lot orders can be executed automatically which creates a much more efficient market for these types of orders. Any delay in executing these orders, such as waiting for an odd lot aggregation may result in an increased risk of a fluctuation in the price of the security.

**Re Claim 2:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses the step of determining whether an interval delay between

executions of odd-lots by a specified quoting market participant has been exceeded before routing a subsequently received odd-lot order for execution to the specified quoting market participant (paragraph 0054)

**Re Claim 3:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses the step of decrementing the odd-lot exposure limit for the quoting market participant against which the received odd-lot order was executed or delivered upon execution or delivery of the received odd-lot order (paragraph 0057).

**Re Claim 4:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein the electronic market maintains a displayable quote size for the quoting market participant for the security traded in the market (paragraph 0021).

**Re Claim 5:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses the step wherein the displayable quote size for the quoting market participant in the security is not decremented in response to the quoting market participant satisfying the odd lot order (paragraph 0073).

**Re Claim 6:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein the odd-lot order becomes executable when the price of the odd-lot order is at the best price in the market (paragraph 0073).

**Re Claim 7:** Samukawa in view of Serkin discloses the claimed method supra and but the references do not explicitly disclose wherein the odd-lot exposure limit is specified for the security for each quoting market participant this is inherent in the fact that the market maker is eligible (i.e. in the rotation for such orders) to execute the offer.

If their limit with respect to odd-lots were not given for each security they would not be eligible to trade said odd lots in said security.

**Re Claim 8:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein routing a received odd-lot order occurs in an odd-lot execution manager that is a separate mechanism for processing and executing orders and distinct from a mechanism for processing normal units of trading (paragraph 0073).

**Re Claim 9:** Samukawa in view of Serkin discloses the claimed method supra but does not explicitly disclose the step further comprising establishing an odd-lot order routing parameter of a predetermined number of orders per firm. However Official Notice is taken that this step is old and well known in the art. It would have been obvious to a person of ordinary skill in the art to include this step to the disclosure of Samukawa in view of Serkin in order to promote fair competition among market participants. If one firm is allowed to enter a very large order at a particular time, that order would take priority over any other order and would take a long time to exhaust. This prevents other participants from achieving an efficient match for their order if they are on the same side as the first firm.

**Re Claim 10:** Samukawa in view of Serkin discloses the claimed method supra but does not explicitly disclose wherein if the odd lot exposure limit has been exceeded, the method further comprises; determining a next available quoting market participant, by retrieving the next available quoting market participants odd-lot exposure limit and determining whether the next quoting market participant has a remaining odd-lot

exposure limit that can satisfy the order. However this step would have been obvious to a person of ordinary skill in the art, as it would prevent orders being filled against a market participant's wishes. Serkin notes that odd lot orders are executed against a market maker in rotation for such orders (paragraph 0073), and therefore an order for an odd lot that would exceed limits established by the participant would not execute, and the process would move through the rotation until an appropriate counterparty can be found.

**Re Claim 11:** Samukawa in view of Serkin does disclose the claimed method supra but does not explicitly disclose suspending processing of odd-lot orders for the security if the process determines that all exposure limits for all quoting participants have been exceeded. However this step is inherent in that if there are no quotes for a particular security it is impossible to match an order from the other side. Therefore the process would have to be suspended, at least temporarily, as no matches would occur.

**Re Claim 12:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein the process remains suspended until a market maker refreshes its odd lot exposure limit (paragaraphs 0061-0062)

**Re Claim 13:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein a quoting market participant is a market maker or auto-execution electronic commerce network or a electronic commerce network that takes deliveries of orders (paragraph 0019 and 0057-0058)

**Re Claim 14:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses the step of decrementing the exposure limit for the market

maker, upon execution of the order and placing the maker at the bottom of a queue (paragraph 0056-0057 and paragraph 0073).

**Re Claim 15:** Samukawa in view of Serkin discloses the claimed method supra but the references do not explicitly disclose wherein the process executes an odd-lot order against a market maker if the market maker has sufficient exposure limit to fill the odd-lot order. However Serkin discloses an odd lot execution manager that routes odd lot orders for orders for execution to a market maker that is first in the rotation for execution of such orders (paragraph 0073). While Serkin does not explicitly disclose that the odd-lot exposure limit has not been exceeded, this is inherent in the fact that the market maker is eligible (i.e. in the rotation for such orders) to execute the offer. It would have been obvious to a person of ordinary skill in the art at the time of invention to include the teachings of Serkin to the disclosure of Samukawa so odd lot orders can be executed automatically which creates a much more efficient market for these types of orders. Any delay in executing these orders, such as waiting for an odd lot aggregation may result in an increased risk of a fluctuation in the price of the security.

**Re Claim 16:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses determining if an order is a mixed lot order and of executing for an odd lot portion using a separate mechanism from the mechanism that executes a round lot portion (paragraph 0073)

**Re Claim 17:** Samukawa in view of Serkin discloses the claimed method supra and Serkin further discloses wherein the odd-lot portion is executed at the round-lot



Art Unit: 3628

price against the next quoting market participant in rotation even if the round-lot price is no longer the best price in the market (paragraph 0073).

**Re Claim 18:** Samukawa discloses the claimed method supra and further discloses

- Aggregating a number of odd lot executions for a particular security to produce an aggregate round lot execution comprised of odd-lot executions (Figure 2, steps S7-S11) and;

Samukawa does not explicitly disclose the step of

- Decrementing an Quote/Order size upon execution of the aggregate round lot execution, when the number of odd lots executed equals a round lot

Serkin discloses decrementing an Quote/Order size upon execution of the aggregate round lot execution, when the number of odd lots executed equals a round lot (paragraph 0056-0058). It would have been obvious to a person of ordinary skill in the art to include the teachings of Serkin to the disclosure of Samukawa to maintain the accuracy of the quote and order system. If the quote/order size is not decreased once a trade is executed, users of the system will see an inaccurate volume of securities on the system since at least a part of that volume is not longer available.

**Re Claims 19-25:** Further electronic market claims would have been obvious in order to perform previously rejected method claims 1-5, 11 and 12 respectively and are therefore rejected using the same art and rationale.

**Re Claims 26-30:** Further electronic market claims would have been obvious in order to perform previously rejected method claims 1-3, 5 and 11 respectively and are therefore rejected using the same art and rationale.

***Response to Arguments***

Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

The rejection based on the 35 U.S.C. 112, first and second paragraph, however has been maintained. The applicant has argued that the term "odd lot exposure limit" is apparent on its face and the a person of ordinary skill in the art would understand that an odd lot exposure limit is a size parameter maintained for market makers, that can be set by the market makers and that specifies amount of a security that a market maker would desire exposure to odd lot orders fro each security that it makes a market in (Remarks, page 11). However the specification describes that this exposure limit can be from 0 to possibly 999,999 shares. It is unclear to the examiner how a particular market maker can be "exposed" to more than 99 odd lot shares of any particular security. For instance if a market maker is "exposed" to 117 shares of a particular security, this represents one round lot of 100 and an odd lot of 17. The examiner does not believe a person of ordinary skill would consider this market maker exposed to an odd lot of 117. This process is iterative at each 100 shares an aggregate round lot is achieved and therefore exposure to 999,999 odd lot shares is contrary to normally accepted definitions of odd lots, including one provided by the applicant ("odd lot orders or orders less than one round lot (e.g., 100 shares for equities)" (page 14). For this

Art Unit: 3628

reason the examiner believes that a person of ordinary skill in the art would not understand the metes and bounds of the claims, particularly an "odd lot exposure limit."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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